

ABSTRACT

A cold die steel excellent in the characteristic of suppressing dimensional change, which has a chemical composition in mass%: C: 0.7% or more and less than 1.6%, Si: 0.5 to 3.0%, Mn: 0.1 to 3.0%, P: less than 0.05% including 0%, S: 0.01 to 0.12%, Cr: 7.0 to 13.0%, one or two elements selected from the group consisting of Mo and W: amounts satisfying the formula $(\text{Mo} + (\text{W}/2)) = 0.5$ to 1.7%, V: less than 0.7% including 0, Ni: 0.3 to 1.5%, Cu: 0.1 to 1.0% and Al: 0.1 to 0.7%. Preferably, the die steel satisfies the formula in mass%: $\text{Ni}/\text{Al} = 1$ to 3.7. It is preferred that the die steel also satisfies the following formula in mass%: $(\text{Cr} - 4.2 \times \text{C}) = 5$ or less and $(\text{Cr} - 6.3 \times \text{C}) = 1.4$ or more and that it contains 0.3% or less of Nb.